Office Action Summary	Application No.	Applicant(s)	
	09/922,581	COMMINS ET AL.	
	Examiner	Art Unit	
	WINNIE YIP	3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,35-44 and 46-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,35-44 and 46-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to applicant's amendment filed on June 3, 2010.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Allowable Subject Matter

1. The indicated allowability of claims 36-39, 41, 43, and 46-49 is withdrawn in view of the discovered references Adams (US Patent No. 5,298,612), Gregg et al. (US Patent No. 5,979,130), Schneller (US patent No. 3775,920) and further consideration. Rejections based on the newly cited references and reconsideration follows.

Claim Objections

2. Claim 46 is objected to because of the following informalities: the term "said shear-resisting" (line 29) should read "said shear-resisting element". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 35, 38-39, 42-43, 44, 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In these claims, the phrase "that are" and “that receive” renders the claims indefinite because is not clear whether the limitation following the phrase, such as "anchored to the underlying structure", are parts of the claimed invention. As better understood, the phrase should read “being anchored" and “receiving and being connected" for positively recite the structural limitation.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 35-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Adams (US Patent No. 6,298,612).

Adams discloses a wall structure capably resists lateral forces imposed on a building incorporating said wall structure, said wall structure comprising: **a**. an underlying structural component (60) as part of the building, and a bottom plate (16) resting on and connected to the underlying structure component; **b.** a plurality of vertically-disposed studs (12) being spaced apart and resting on said bottom plate; **c.** a top plate (see Fig. 1) resting on and connecting to said vertically-disposed studs; **d.** at least one shear-resisting assembly (36) disposed between two studs and connected between the top plate and the underlying structural component (60), the shear-resisting assembly (see Figs. 1, 13, and 11) including: **(1)**.a planar shear-resisting element (i.e., 110) (see Fig. 11) being a sheet element inherently having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges; **(4-5).** a first vertical chord (20) and a second vertical chord (22) being connected to opposite side edges of the shear-resisting element to form sides (116, 116) of the assembly; **(2).** a top strut (28) connected to upper ends of the two chords and to the top edge of the shear resisting element (110) to define a top side (112) of the assembly, **(3).** a bottom strut (28) connected between bottom ends of the first and second chords and to the bottom edge of the shear-resisting element to define a bottom side (114) of the assembly, and **(e)**. a plurality of fasteners (124) each having a threaded shank portion being inserted through the top strut (112) of

the shear-resisting assembly and into the top plate (56) to connected the shear-resisting assembly (10) to the top plate, and the bottom plate (114) of the shear-resisting assembly rests directly on the underlying structure component (60) and being connected to the underlying structural component (11) by first and second anchor bolts (70), and standoff plates (54) via nuts (122) providing holdowns to receive and connect the anchor bolts respectively for holdowning the wall on the underlying structural component; and wherein the elements of the wall structure can be made form wood (see col. 1, line 12; col. 11, lines 3-4, Fig. 1).

7. Claims 36, 38, 40 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller (US Patent No. 5,706,626).

Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said wall comprising: **a**. an underlying structural component (170) for supporting said wall, and a bottom plate (161) resting on and connected to the underlying structure component; **b.** a plurality of vertically-disposed studs (160a, 160b) (see Fig. 5) resting on said bottom plate; **c.** a top plate (162) resting on said vertically-disposed studs; **d.** a shear-resisting assembly (100, see Figs. 1 and 1A) including: **(1).** a planar shear-resisting element (110) inherently having a proximal face and a distal face, a top edge, a bottom edge and first and

second side edges, **(2).** a top strut (104) connected to the top edge of the shear-resisting element and disposed substantially parallel to the top plate of the wall, **(3).** a bottom strut (106) connected to the bottom edge of the shear-resisting element, **(4-5).** first and second chords (102a, 102b) each being connected to the first and second side edges of the planar shear-resisting element respectively by threaded fasteners (132); **(e).** first and second anchor bolts (166 or 172) are anchored to the underlying structure component respectively; **(f).** first and second u-shaped brackets (130a, 130b) connected to the first and second chords respectively by fasteners (132 or 124); wherein the bottom plate (161), the top plate (162) and the studs (160a, 160b) are made of wood, wherein the shear-resisting assembly (100) rests directly on the underlying structural component, the shear-resisting assembly disposed between and connected to the top plate via a mounting plate (164) and screws (152) and connected to the underlying structure component via the holdowns and anchor bolts (166 and 172), and further:

In regard to claims 36 and 38, Mueller teaches the underlying structure having holdowns provided by the u-brackets (130a, 130b) via nuts (135) and the anchor bolts (166 and 172), whereby the first and second chords of the shear-resisting assembly rest directly on and connected to the underlying structure component by holdowns.

In regard to claim 40, Mueller teaches the u-brackets (130a, 130b) providing standoff plates, and the first and second chords of the shear-resisting assembly (100) that rest on the standoff plates respectively resting directly on the underlying structure component.

In regard to claim 42, Mueller teaches the u-shaped plate via nuts (135) also providing a first and second holdowns to receive and connected to the first and second anchor bolts (see Fig. 4A) and being also connected to the chords, respectively.

Claim Rejections - 35 USC § 102 & 103

8. Claim 44 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mueller (US Parent No. 5,706,626).

Mueller discloses a wall (Fig. 5) designed to resist lateral forces imposed on a building incorporating said wall, said wall comprising: **a**. an underlying structural component (170) for supporting said wall, and a bottom plate (161) resting on and connected to the underlying structure component; **b.** a plurality of vertically-disposed studs (160a, 160b) (two are shown , see Fig. 5) resting on said bottom plate; **c.** a top plate (162) resting on said vertically-disposed studs; **d.** a shear-

resisting assembly (100, see Figs. 1 and 1A) including: **(1).** a planar shear-resisting element (110) inherently having a proximal face and a distal face, a top edge, a bottom edge and first and second side edges, **(2).** a top strut (104) connected to the top edge of the shear-resisting element and disposed substantially parallel to the top plate of the wall, **(3).** a bottom strut (106) connected to the bottom edge of the shear-resisting element, **(4-5).** first and second chords (102a, 102b) each being connected to the first and second side edges of the planar shear-resisting element respectively by threaded fasteners (132); **(e).** first and second anchor bolts (166 or 172) are anchored to the underlying structure component respectively; **(f).** first and second holdowns provided by u-brackets (130a, 130b) via nuts (135) to be connected the first and second anchor bolts (166) respectively for holdown the share-resisting elements to the underlying structure component, and the first and second u-shaped brackets (130a, 130b) connected to the first and second chords respectively by fasteners (132 as shown in Fig. 4A) or alternatively, by fasteners that have threaded shank portion to be inserted into only a selected distance into the first and second chords respectively without passing all the way through the chord, in another word, the fastener is not passed from one side of the chord to opposite side of the chord (as shown in Fig. 4B).

Alternatively, although Mueller does not explicitly define the threaded fasteners that connect the holdowns to the chords respectively being screws which are inserted only a selected distanced into the respective chord without passing all the way through the chords as clamed invention. However, Mueller teaches the first and second chords (102a, 10b) being mounted to the frame by u-shape brackets (130a, 130b) by suitable threaded fasteners including either large bolts (132 as shown in Fig. 4A) passed through two sides of the bracket or screws (124 as shown in Fig. 4B) that inserted only a selected distance into a side of the chord without passing all the way through the chords as claimed invention. It would have been obvious to one ordinary skill in the construction art at the time the invention was made to modify the wall structure of Muller having screws each having threaded shank portion inserted a suitable distance into opposite sides of the chords as shown in Fig.4B instead of a large bolt passed through two opposite sides of the chord as shown in Fig. 4A for tightening the chords of the shear-resisting element to the anchor holdowns as an obvious matter of design choice of fasteners to accommodate various applications for achieve a predictable result of quickly and easily assembly.

9. Claims 1 and 35 are rejected under 35 U.S.C. 103(a) as being obvious over Mueller (U.S. Patent No. 5,706,626) in view of Hardy (US Patent No. 5,729,950).

Mueller teaches a wall comprising all structural limitations as claimed as explained and applied above rejection except that Mueller does not explicitly define the shear- resisting assembly being connected to the top plate by fasteners that include a threaded shank portion inserted through the top strut of the shear-resisting assembly and into the top plate for connecting the shear-resisting assembly to the top plate as claimed. Hardy teaches a wall comprising a wall frame including a bottom plate (38) mounted on a underlying structural component (40), a top plate (36), a plurality of studs (34) disposed between the top and bottom plates, and a shear-resisting assembly (20) connected between the top and bottom plates and disposed two adjacent studs by fasteners (42), wherein the fasteners (42) having a threaded shank portion (42a) being inserted through a top strut (12a) and into the top plate (36) from the underside of the top strut for connecting the shear-resisting assembly to the top plate. It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the wall of Mueller having a shear-resisting assembly being connected to the top plate and a bottom plate of a wall frame by fasteners each of which includes a threaded shank portion being inserted through the top strut of the shear-

resisting assembly and into the top plate of the wall frame as taught by Hardy instead being connected through an additional plate, as an old and know method of installation of a frame structure, for more easily connecting and replacing the shear- resisting assembly to the top plate of the wall.

10. Claims 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmerman, Sr. et al. (US Patent No. 6,158,184) in view of Utzman (US Patent No. 5,870,870).

Timmerman, Sr. et al. discloses a wall comprising: **a.** an underlying structural component (4 or 124) and a bottom plate (20) resting on the underlying structural component which could be a foundation (4) of a building with a standoff plate (11) mounted thereon; **b.** a plurality of vertically-disposed studs (26, 26A, or 114) resting on and connected to the bottom plate; **c.** a top plate (110) resting on and connected to the vertically-disposed studs; **d.** a shear- resisting assembly (2) connected to and disposed between to the top plate and underlying structural component, the shear-resisting assembly including: a top strut (16, or 534), a bottom strut (20, or 536), a first chord (22, or 533), a second chord (24, or 535) being connected together edge-by edge by mounting plates (13) to form a substantially planar structure; **d.** first and second foundation anchors (12) being

anchored to the underlying structural component; **e.** first and second holdowns (6, 8 or 118, 120 as prior art) receiving and being connected to the first and second foundation anchors by and nut/bolts (248) to anchor the chords to the underlying structural component respectively, and being connected to the first and second chords by fasteners/bolts (30, 31), and wherein the top plate, the bottom plate, the vertical stud, the shear-resisting assembly being made form wood. Although Timmerman, Sr. et al. (in early application) does not explicitly define the shear-resisting assembly having a shear-resisting element for connecting and covering the top strut, the bottom strut, and the first and second chords as claimed, Utzman teaches a shear resisting assembly (A) (see Fig. 1) comprising a top strut, a bottom strut and a plurality of chords (3) connected to the top and bottom struts to form a support frame, and at least two adjoining structural panels (2) providing a shear resisting element having edges being secured on the support frame to form the shear-resisting assembly by edge fasteners (1) as claimed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the wall of Timmerman, Sr. et al. having the prefabricated shear-resisting assembly including a shear-resisting element formed by at least one structural panel having edges being connected to the top strut, the bottom strut, and the first and second chords to form a rigid single shear-resisting assembly as taught

by Utzman for the purpose of providing an alternative methodology for easily positioning and connecting frame elements together to form a large wall unit and safe more material, since it has been held to be within the general skill of a worker in the art of construction to connect a plurality members together into a single unit.

11. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Timmerman, Sr. et al. (US Patent No. 6,158,184) in view of Utzman (US Patent No. 5,870,870) and Gregg et al. (US Patent No. 5,979,130).

Timmerman Sr. et al as modified by Utzman teaches a wall comprising all structural limitations as claimed as explained and applied above rejection except that Timmerman Sr. et al. does not explicitly define the holdowns being connected to the first and second chords respectively fasteners that each includes a threaded shank portion inserted only a selected distance into the chord without passing through all the way through the chord respectively as claimed. Gregg et al. teaches a wall comprising studs/chords (11) rested on a underlying structural component (21), a plurality of corresponding holdowns (1) being secured to the underlying structural component by anchor member (4), and the holdowns being mounted to the studs/chords respectively by fasteners (10) each of which has a threaded shank portion being inserted into the stud/chord by a suitable distance

without passing all the way through the chord as claimed. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the shear-resisting assembly of the wall of Timmerman Sr. et al. as modified by Utzman further having the holdowns being connected to the chords by fasteners that has a threaded shank portion being inserted into a distance of the chord without passing all the way through the chord as taught by Gregg et al. instead of a bolt for easily securing a holdown to a wall structure without drilling holes previously on the chords as an obvious matter of design choice for an alternate methodology of securing two members together as known in the construction art.

12. Claims 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmerman, Sr. et al. '184 in view of Utzman (US Patent No. 5,870,870) and further in view of Schneller (US patent No. 3775,920).

Timmerman Sr. et al as modified by Utzman teaches a wall comprising all structural limitations as claimed as explained and applied above rejection except that Timmerman Sr. et al. and Utzman do not explicitly define the planar shear-resisting element having U-shaped boundary edging members disposed along edges of the planar shear-resisting element for receiving the edge fasteners as

claimed. Schneller teaches a planar panel connected to a frame comprising boundary edging members which can be single strap (41) or a u-shaped member (42) disposed along the edges of the panel to be fastened to the frame by edge fasteners (40) to increasing a rigidity of the panel. It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the planar shear- resisting element/wall board of Timmerman et al. having U-shaped boundary edging members disposed on the edges of the planar element for receiving the edge fasteners as taught by Schneller for increasing the rigidity of the planar element/wall board and increasing the strength of the connection made by the fasteners.

Response to Arguments

13. Applicant's arguments with respect to rejection under 35 U.S.C. 102 (b) as being anticipated by O'Malley has been fully considered and is persuasive. Therefore, the rejection has been withdrawn.

14. Applicant's arguments with respect to the rejection under 35 U.S.C. 102 (b) as being anticipated by Mueller '626 has been fully considered but they are not persuasive. Applicant argues that Mueller fails to have the limitation as amended as "first and second chords rest directly on underlying structure component…", as

discussed above rejection, Mueller teaches a wall having a top plate (182), a bottom plate (161) rested on a underlying structural component which could be a foundation of a building, a shear-resisting assembly (100) having the chords (102a, 102b) which is considered being directly rested on the underlying structure component by brackets (130a, 130b) which may be holdowns as recited in claims 35, 38, or may be a standoff plate as recited in claim 40. Wherein the brackets can be considered as part of the underlying structural component. Therefore, Mueller appears broadly read on the claimed invention. And the rejections are still granted.

Inquiry Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 571-272-6870. The examiner can normally be reached on M-F (9:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Winnie Yip/
Primary Examiner
Art Unit 3636

wy
August 12, 2010